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APPLICAT	TON NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/53	7,237	05/31/2005	Wolfgang Janssen	2002P19841WOUS	6361
Siem	7590 nens Corporatio	06/07/200 <sup>-</sup>	7	EXAMINER	
Intel	Intellectual Property Department			NGUYEN, NINH H	
	170 Wood Avenue South Iselin, NJ 08830			ART UNIT	PAPER NUMBER
				3745	
				MAIL DATE	DELIVERY MODE
				06/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)				
	10/537,237	JANSSEN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ninh H. Nguyen	3745				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet w	ith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 136(a). In no event, however, may a will apply and will expire SIX (6) MO e, cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	·					
2a)⊠ This action is <b>FINAL</b> . 2b)□ Thi	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) 13-24 is/are pending in the application	on.					
4a) Of the above claim(s) is/are withdra						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>13,14 and 16-20</u> is/are rejected.						
7)⊠ Claim(s) <u>15,21-24</u> is/are objected to.						
8) Claim(s) are subject to restriction and/	or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examin	er.	•				
10)⊠ The drawing(s) filed on 31 May 2005 is/are: a		ected to by the Examiner.				
Applicant may not request that any objection to the	e drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	ction is required if the drawin	g(s) is objected to. See 37 CFR 1.121(d)	).			
11)☐ The oath or declaration is objected to by the E	examiner. Note the attache	ed Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreig a)⊠ All b)□ Some * c)□ None of:	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
1. ☐ Certified copies of the priority documen	nts have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the price	ority documents have bee	n received in this National Stage				
application from the International Burea	au (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a lis	t of the certified copies no	t received.				
Attachment(s)						
1) Notice of References Cited (PTO-892)		Summary (PTO-413) (s)/Mail Date				
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> </ul>	5) 🔲 Notice of	Informal Patent Application				
Paper No(s)/Mail Date	6) 🔲 Other:	·				

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### **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments filed 30 March 2007 have been fully considered but they are not persuasive.

Applicant argues that the prior art does not disclose the newly added limitations of claim 13, namely, the first material having undergone a tempering process, and the first material is characterized by a low stability during the tempering process.

The Examiner respectfully disagrees.

The newly added limitations merely make claim 13 a product-by-process claim. Since claim 13 is an apparatus claim, how the first material is made is not given patentable weigh. See MPEP § 2113. Similarly, claims 17, 18 are also treated as product-by-process claims.

### Claim Objections

2. Claims 22-24 are objected to because the claims are method claims, and the tempering steps are not positively recited in the claims.

Appropriate correction is required.

### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 13, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Clark et al. (4,962,586).

Clark et al. disclose a turbine shaft oriented in an axial direction (Figs. 1-6), comprising a first flow region 3 (Fig. 2); a second flow region 5 that adjoins the first flow region in an axial direction; a first material in the first flow region; and a second material in the second flow region, wherein the first material comprises a heat-resistant steel (col. 1, lines 39-42) and the second material comprises a steel which is tough a low temperatures;

wherein the second material comprises a 3.5 NiCrMoV steel (col. 3, lines 56-63);

5. Claims 13 and 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada et al. (6,499,946).

Yamada discloses a turbine shaft oriented in an axial direction (Figs. 1-13), comprising a first flow region IPS (Fig. 1); a second flow region LPS that adjoins the first flow region in an axial direction; a first material in the first flow region; and a second material in the second flow region, wherein the first material comprises a heat-resistant steel, and the second material comprises a steel which is tough a low temperatures (claims 1, 2);

wherein the second material comprises a 3-4% NiCrMoV steel (claim 2);

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wherein a single structural weld seam is arranged between the first material and the second material (Fig. 9);

### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claim14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. in view of Komai et al. (5,814,274).

Clark et al. disclose all the limitations except the first material does not comprise a 2 CrMoNiWV steel as claimed.

Komai et al. teach a steel having high temperature strength and excellent weldability comprising (0.3 - 3%) CrMoNiWV (abstract).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made, to make the turbine shaft of Clark et al. with the first flow region comprises (0.3 - 3%) CrMoNiWV for the purpose of providing a turbine shaft with a fist flow region comprising a steel having high temperature strength and excellent weldability as taught by Komai et al.

8. Claims14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. in view of Komai et al. (5,814,274).

Yamada et al. disclose all the limitations except the first material does not comprise a 2CrMoNiWV steel as claimed.

Komai et al. teach a steel having high temperature strength and excellent weldability comprising (0.3 - 3%) CrMoNiWV (abstract).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made, to make the turbine shaft of Yamada et al. with the first flow region comprises (0.3 - 3%) CrMoNiWV for the purpose of providing a turbine shaft with a fist flow region comprising a steel having high temperature strength and excellent weldability as taught by Komai et al.

# Allowable Subject Matter

- 9. Claims 15 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 10. Claims 22-24 would be allowable if rewritten to overcome the objection, set forth in the "Claim Objections" section of this Office action and to include all of the limitations of the base claim and any intervening claims.

#### Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ninh Nguyen whose telephone number is (571) 272-4823. The examiner can be normally reached on Monday-Friday from 7:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached at (571) 272-4820. The fax number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, please go to http://pair-direct.uspto.gov or contact the Electronic Business center (EBC) at 866-217-9197 (toll-free).

NINH H. NGUYEN

Nhn June 1, 2007